

ABSTRACT OF THE DISCLOSURE

A Direction Finding Method and System Using Probabilistic Mapping is disclosed. Also disclosed is a preferred system that employs a technique for taking in data sets (lines of bearing) from DF receivers and characterizing those signals with their respective probabilities of error. Then using a unique method, the preferred system can display the triangulated position on a map with an overlay of probability fields indicating the emitter location with varying levels of confidence. Even further, the preferred system is able to redraw the probability fields on the map display in real-time as new data is collected and updated. In this way, a far more efficient EL System has been achieved in which the emitter's position can be determined more quickly. It should be noted that with this invention, triangulation can be done with just a single (mobile) DF Set in the EL System. Today's systems for triangulation must use at least three DF Sets.